

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: John C. Harvey and James W.
Cuddihy

Serial No.: 08/447,447

Filing Date: May 23, 1995

For: Signal Processing Apparatus and
Methods

Group Art Unit: 2602

Examiner:

Assistant Commissioner of Patents
Washington D.C. 20231

RECEIVED
95 DEC 11 PM 8:51
GROUP 260

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a) and in conformance with the procedures of 37 C.F.R. §§ 1.97-98 and M.P.E.P. § 609, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449.

The above-referenced application claims priority under 35 U.S.C. § 120 of the following applications:

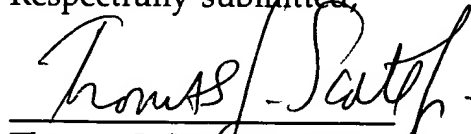
<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

Applicants believe that all references cited on the attached PTO 1449 form were cited by or submitted to the PTO in one or more of the case cited above or in U.S. Patent Application Serial No. 06/829,531, filed February 15, 1986 now U.S. Patent No. 4,704,725, U.S. Patent Application Serial No. 06/317,510, filed November 3, 1981 now U.S. Patent No. 4,694,490 and co-pending U.S. Patent Application Serial No. 08/448,143, filed May 23, 1995. Therefore, no copies of the listed references are provided herewith. Additionally, references believed to be dated in the period from November 3, 1981 through September 11, 1987 are included in the present IDS as this application only claims priority to the September 11, 1987 filing date. It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

CERTIFICATION AND/OR FEE

Since this IDS is being filed pursuant to 37 C.F.R. § 1.97(b) before the later of three months after the filing date of the above-referenced application or the date of receipt of the first Office action on the merits, no certification or fee is required.

Respectfully submitted,



Thomas J. Scott, Jr. (Reg. No. 27,836)

Dated: December 5, 1995

HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402
(202) 783-0800 (telephone)
(202) 383-6610 (telecopier)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :
John C. Harvey and James W. Cuddihy : Examiner:
Serial No. 08/447,447 : Group Unit: 2602
Filed 23-May-95 : Atty Dkt: 5634.140
For **SIGNAL PROCESSING APPARATUS AND METHODS**

COPENDING RELATED U.S. PATENT APPLICATIONS

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

Listed below are copending U.S. patent applications related to this application.

<u>Application No.</u>	<u>Filing Date</u>	<u>Atty. Dkt.</u>
08/113,329	30-Aug-93	5634.008
08/397,371	2-March-95	5634.017
08/397,582	2-March-95	5634.010
08/397,636	2-March-95	5634.012
08/435,757	9-May-95	5634.036
08/435,758	9-May-95	5634.041
08/437,044	9-May-95	5634.047
08/437,045	9-May-95	5634.042
08/437,629	9-May-95	5634.044
08/437,635	9-May-95	5634.045
08/437,791	9-May-95	5634.040
08/437,819	9-May-95	5634.049
08/437,864	9-May-95	5634.038
08/437,887	9-May-95	5634.037
08/437,937	9-May-95	5634.048
08/438,011	9-May-95	5634.050
08/438,206	9-May-95	5634.039

08/438,216	9-May-95	5634.046
08/438,659	9-May-95	5634.043
08/439,668	15-May-95	5634.062
08/439,670	15-May-95	5634.081
08/440,657	15-May-95	5634.051
08/440,837	15-May-95	5634.059
08/441,027	16-May-95	5634.053
08/441,033	15-May-95	5634.060
08/441,575	15-May-95	5634.056
08/441,577	15-May-95	5634.080
08/441,701	15-May-95	5634.052
08/441,749	16-May-95	5634.082
08/441,821	16-May-95	5634.085
08/441,880	16-May-95	5634.075
08/441,942	16-May-95	5634.061
08/441,996	16-May-95	5634.086
08/442,165	16-May-95	5634.087
08/442,327	16-May-95	5634.083
08/442,335	16-May-95	5634.088
08/442,369	16-May-95	5634.055
08/442,383	16-May-95	5634.074
08/442,505	16-May-95	5634.084
08/442,507	16-May-95	5634.089
08/444,643	19-May-95	5634.111
08/444,756	19-May-95	5634.107
08/444,757	19-May-95	5634.103
08/444,758	19-May-95	5634.114
08/444,781	19-May-95	5634.110
08/444,786	19-May-95	5634.100
08/444,787	19-May-95	5634.118
08/444,788	19-May-95	5634.109
08/444,887	19-May-95	5634.115
08/445,045	19-May-95	5634.108
08/445,054	19-May-95	5634.101
08/445,290	19-May-95	5634.113
08/445,294	19-May-95	5634.119
08/445,296	19-May-95	5634.105
08/445,328	19-May-95	5634.112
08/446,123	19-May-95	5634.116
08/446,124	19-May-95	5634.117
08/446,429	22-May-95	5634.151
08/446,430	22-May-95	5634.152
08/446,431	22-May-95	5634.150
08/446,432	22-May-95	5634.149
08/446,494	22-May-95	5634.154

08/446,553	19-May-95	5634.104
08/446,579	19-May-95	5634.106
08/447,380	24-May-95	5634.125
08/447,414	23-May-95	5634.122
08/447,415	23-May-95	5634.129
08/447,416	23-May-95	5634.128
08/447,446	23-May-95	5634.135
08/447,447	23-May-95	5634.140
08/447,448	23-May-95	5634.132
08/447,449	23-May-95	5634.138
08/447,496	23-May-95	5634.121
08/447,502	23-May-95	5634.143
08/447,529	24-May-95	5634.144
08/447,611	23-May-95	5634.137
08/447,621	23-May-95	5634.156
08/447,679	23-May-95	5634.130
08/447,711	23-May-93	5634.153
08/447,712	23-May-95	5634.127
08/447,724	23-May-95	5634.131
08/447,726	23-May-95	5634.159
08/447,826	23-May-95	5634.126
08/447,908	23-May-95	5634.134
08/447,938	23-May-95	5634.133
08/447,974	23-May-95	5634.145
08/447,977	23-May-95	5634.141
08/448,099	23-May-95	5634.158
08/448,116	23-May-95	5634.157
08/448,141	23-May-95	5634.155
08/448,143	23-May-95	5634.120
08/448,175	23-May-95	5634.102
08/448,251	23-May-95	5634.142
08/448,309	23-May-95	5634.139
08/448,326	23-May-95	5634.123
08/448,643	24-May-95	5634.072
08/448,644	24-May-95	5634.163
08/448,662	24-May-95	5634.201
08/448,667	24-May-95	5634.179
08/448,794	24-May-95	5634.203
08/448,810	24-May-95	5634.177
08/448,833	24-May-95	5634.162
08/448,915	24-May-95	5634.069
08/448,916	24-May-95	5634.209
08/448,917	24-May-95	5634.165
08/448,976	24-May-95	5634.161
08/448,977	24-May-95	5634.071

08/448,978	24-May-95	5634.181
08/448,979	24-May-95	5634.207
08/449,097	24-May-95	5634.208
08/449,110	24-May-95	5634.204
08/449,248	24-May-95	5634.171
08/449,263	24-May-95	5634.172
08/449,281	24-May-95	5634.183
08/449,291	24-May-95	5634.068
08/449,302	24-May-95	5634.147
08/449,351	24-May-95	5634.170
08/449,369	24-May-95	5634.058
08/449,411	24-May-95	5634.180
08/449,413	24-May-95	5634.174
08/449,523	24-May-95	5634.182
08/449,530	24-May-95	5634.124
08/449,531	24-May-95	5634.176
08/449,532	24-May-95	5634.205
08/449,652	24-May-95	5634.146
08/449,697	24-May-95	5634.175
08/449,702	24-May-95	5634.202
08/449,717	24-May-95	5634.067
08/449,718	24-May-95	5634.164
08/449,798	24-May-95	5634.206
08/449,800	24-May-95	5634.184
08/449,829	24-May-95	5634.178
08/449,867	24-May-95	5634.169
08/449,901	23-May-95	5634.136
08/450,680	24-May-95	5634.200
08/451,203	26-May-95	5634.079
08/451,377	26-May-95	5634.070
08/451,496	26-May-95	5634.057
08/451,746	26-May-95	5634.078
08/452,395	26-May-95	5634.065
08/458,566	2-Jun-95	5634.230
08/458,699	2-Jun-95	5634.247
08/458,760	2-Jun-95	5634.217
08/459,216	2-Jun-95	5634.218
08/459,217	2-Jun-95	5634.231
08/459,218	2-Jun-95	5634.256
08/459,506	2-Jun-95	5634.224
08/459,507	2-Jun-95	5634.232
08/459,521	2-Jun-95	5634.233
08/459,522	2-Jun-95	5634.238
08/459,788	2-Jun-95	5634.243
08/460,043	2-Jun-95	5634.215

08/460,081	2-Jun-95	5634.240
08/460,085	2-Jun-95	5634.239
08/460,120	2-Jun-95	5634.214
08/460,187	2-Jun-95	5634.220
08/460,240	2-Jun-95	5634.241
08/460,256	2-Jun-95	5634.254
08/460,274	2-Jun-95	5634.236
08/460,387	2-Jun-95	5634.219
08/460,394	2-Jun-95	5634.222
08/460,401	2-Jun-95	5634.242
08/460,556	2-Jun-95	5634.248
08/460,557	2-Jun-95	5634.245
08/460,591	2-Jun-95	5634.216
08/460,592	2-Jun-95	5634.225
08/460,634	2-Jun-95	5634.246
08/460,642	2-Jun-95	5634.244
08/460,668	2-Jun-95	5634.211
08/460,677	2-Jun-95	5634.221
08/460,711	2-Jun-95	5634.212
08/460,713	2-Jun-95	5634.253
08/460,743	2-Jun-95	5634.229
08/460,765	2-Jun-95	5634.255
08/460,766	2-Jun-95	5634.249
08/460,770	2-Jun-95	5634.237
08/460,793	2-Jun-95	5634.213
08/460,817	2-Jun-95	5634.223
08/466,887	6-Jun-95	5634.281
08/466,888	6-Jun-95	5634.270
08/466,890	6-Jun-95	5634.298
08/466,894	6-Jun-95	5634.276
08/467,045	6-Jun-95	5634.285
08/467,904	6-Jun-95	5634.284
08/468,044	6-Jun-95	5634.282
08/468,323	6-Jun-95	5634.292
08/468,324	6-Jun-95	5634.259
08/468,641	6-Jun-95	5634.263
08/468,736	6-Jun-95	5634.277
08/468,994	6-Jun-95	5634.297
08/469,056	6-Jun-95	5634.264
08/469,059	6-Jun-95	5634.288
08/469,078	6-Jun-95	5634.279
08/469,103	6-Jun-95	5634.300
08/469,106	6-Jun-95	5634.266
08/469,107	6-Jun-95	5634.294
08/469,108	6-Jun-95	5634.269

08/469,109	6-Jun-95	5634.296
08/469,355	6-Jun-95	5634.260
08/469,496	6-Jun-95	5634.290
08/469,517	6-Jun-95	5634.287
08/469,612	6-Jun-95	5634.280
08/469,623	6-Jun-95	5634.273
08/469,624	6-Jun-95	5634.262
08/469,626	6-Jun-95	5634.272
08/470,051	6-Jun-95	5634.268
08/470,052	6-Jun-95	5634.302
08/470,053	6-Jun-95	5634.291
08/470,054	6-Jun-95	5634.265
08/470,236	6-Jun-95	5634.278
08/470,447	6-Jun-95	5634.275
08/470,448	6-Jun-95	5634.293
08/470,476	6-Jun-95	5634.301
08/470,570	6-Jun-95	5634.289
08/470,571	6-Jun-95	5634.261
08/471,024	6-Jun-95	5634.299
08/471,191	6-Jun-95	5634.267
08/471,238	6-Jun-95	5634.271
08/471,239	6-Jun-95	5634.283
08/471,240	6-Jun-95	5634.286
08/472,066	6-Jun-95	5634.295
08/472,399	7-Jun-95	5634.305
08/472,462	7-Jun-95	5634.315
08/472,980	7-Jun-95	5634.353
08/473,213	7-Jun-95	5634.320
08/473,224	7-Jun-95	5634.187
08/473,484	7-Jun-95	5634.258
08/473,927	7-Jun-95	5634.333
08/473,996	7-Jun-95	5634.073
08/473,997	7-Jun-95	5634.364
08/473,998	7-Jun-95	5634.328
08/473,999	7-Jun-95	5634.342
08/474,119	7-Jun-95	5634.330
08/474,139	7-Jun-95	5634.324
08/474,145	7-Jun-95	5634.303
08/474,146	7-Jun-95	5634.186
08/474,147	7-Jun-95	5634.226
08/474,496	7-Jun-95	5634.360
08/474,674	7-Jun-95	5634.319
08/474,963	7-Jun-95	5634.098
08/474,964	7-Jun-95	5634.064
08/475,341	7-Jun-95	5634.160

08/475,342	7-Jun-95	5634.234
08/477,547	7-Jun-95	5634.329
08/477,564	7-Jun-95	5634.340
08/477,570	7-Jun-95	5634.335
08/477,660	7-Jun-95	5634.090
08/477,711	7-Jun-95	5634.312
08/477,712	7-Jun-95	5634.173
08/477,805	7-Jun-95	5634.197
08/477,955	7-Jun-95	5634.188
08/478,044	7-Jun-95	5634.334
08/478,107	7-Jun-95	5634.309
08/478,544	7-Jun-95	5634.306
08/478,663	7-Jun-95	5634.099
08/478,767	7-Jun-95	5634.316
08/478,794	7-Jun-95	5634.347
08/478,858	7-Jun-95	5634.351
08/478,864	7-Jun-95	5634.167
08/478,908	7-Jun-95	5634.313
08/479,042	7-Jun-95	5634.352
08/479,215	7-Jun-95	5634.358
08/479,216	7-Jun-95	5634.341
08/479,217	7-Jun-95	5634.093
08/479,374	7-Jun-95	5634.148
08/479,375	7-Jun-95	5634.326
08/479,414	7-Jun-95	5634.359
08/479,523	7-Jun-95	5634.365
08/479,524	7-Jun-95	5634.054
08/479,667	7-Jun-95	5634.192
08/480,059	7-Jun-95	5634.063
08/480,060	7-Jun-95	5634.227
08/480,383	7-Jun-95	5634.349
08/480,392	7-Jun-95	5634.310
08/480,740	7-Jun-95	5634.343
08/481,074	7-Jun-95	5634.190
08/482,573	7-Jun-95	5634.096
08/482,574	7-Jun-95	5634.210
08/482,857	7-Jun-95	5634.311
08/483,054	7-Jun-95	5634.195
08/483,169	7-Jun-95	5634.338
08/483,174	7-Jun-95	5634.251
08/483,269	7-Jun-95	5634.307
08/483,980	7-Jun-95	5634.066
08/484,275	7-Jun-95	5634.323
08/484,276	7-Jun-95	5634.092
08/484,858	7-Jun-95	5634.362

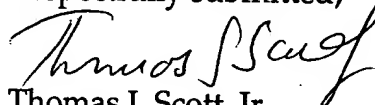
08/484,865	7-Jun-95	5634.348
08/485,282	7-Jun-95	5634.361
08/485,283	7-Jun-95	5634.199
08/485,507	7-Jun-95	5634.304
08/485,772	7-Jun-95	5634.332
08/485,775	7-Jun-95	5634.077
08/486,258	7-Jun-95	5634.357
08/486,259	7-Jun-95	5634.257
08/486,265	7-Jun-95	5634.228
08/486,266	7-Jun-95	5634.337
08/486,297	7-Jun-95	5634.331
08/487,155	7-Jun-95	5634.308
08/487,397	7-Jun-95	5634.250
08/487,408	7-Jun-95	5634.356
08/487,410	7-Jun-95	5634.314
08/487,411	7-Jun-95	5634.318
08/487,428	7-Jun-95	5634.363
08/487,506	7-Jun-95	5634.350
08/487,516	7-Jun-95	5634.094
08/487,526	7-Jun-95	5634.355
08/487,536	7-Jun-95	5634.097
08/487,546	7-Jun-95	5634.325
08/487,556	7-Jun-95	5634.321
08/487,565	7-Jun-95	5634.327
08/487,649	7-Jun-95	5634.344
08/487,851	7-Jun-95	5634.252
08/487,893	7-Jun-95	5634.191
08/487,980	7-Jun-95	5634.076
08/487,981	7-Jun-95	5634.196
08/487,982	7-Jun-95	5634.095
08/487,984	7-Jun-95	5634.346
08/488,032	7-Jun-95	5634.189
08/488,058	7-Jun-95	5634.322
08/488,378	7 Jun 95	5634.339
08/488,383	7-Jun-95	5634.166
08/488,436	7-Jun-95	5634.336
08/488,438	7-Jun-95	5634.235
08/488,439	7-Jun-95	5634.185
08/488,619	7-Jun-95	5634.317
08/488,620	7-Jun-95	5634.354
08/498,002	7-Jun-95	5634.345
08/511,491	6-Jun-95	5634.274

REMARKS

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a), Applicants herewith submit a reference to all related copending U.S. Patent Applications now pending before the U.S. Patent and Trademark Office.

Date: December 13, 1995
HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004
Tel: (202) 383-6614

Respectfully submitted,



Thomas J. Scott, Jr.

Reg. No. 27,836

Attorney for Applicants